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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/681,835	06/14/2001	Yong Rui	MCS-071-00	2855

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EXAMINER

SENF, BEHROOZ M

ART UNIT	PAPER NUMBER
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2621

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	12/27/2006	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

09/681,835

Applicant(s)

RUI ET AL.

Examiner

Behrooz Senfi

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 September 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-23 and 25-34 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-23 and 25-34 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on 14 June 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 09/14/2006 has been entered.

Response to Amendment

2. The Declaration under 37 CFR 1.132 filed 09/14/2006 is sufficient to overcome the rejection of claims 1 – 23 and 25 - 34 based upon Michael H. Bianchi (a Fully Automatic, Multi-Camera System to Televisе Auditorium Presentations) in view of Qiong Liu (Automatic Camera Management for Lecture Room Environments) as set forth in the last Office Action, mailed 06/14/2006. However, upon further consideration, a new ground(s) of rejection is made in view of Michael H. Bianchi (a Fully Automatic, Multi-Camera System to Televisе Auditorium Presentations) and Li-wei He (The Virtual Cinematographer: A Paradigm for Automatic Real-Time Camera Control and Directing).

Double Patenting

3. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140

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F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

4. Claims 1 – 23 and 25 – 34 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1 – 26 of U.S.

Patent No. 6,937,266.

Regarding claims 1 – 23 and 25 – 34, it is noted that although the conflicting claims are not identical in terms of wording and terminology, their scopes are substantially the same and they are not patentably distinct from each other; because claim 1 of the instant application pertains to an automated video production system for on line publishing of a lecture including; a camera system that provides multiple camera views of the lecture, a virtual director that uses probabilistic rules and a set of expert video production rules, which is an obvious variant to claim 23 of the US 6,937,266 patent.

In view of the above, It is noted that allowing claims 1 – 23 and 25 – 34 of the instant application would result in an unjustified or improper timewise extension of the “right to exclude” granted by a patent. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Feb. Cir. 1993).

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1 – 23 and 25 - 34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Michael H. Bianchi (a Fully Automatic, Multi-Camera System to Televisе Auditorium Presentations) in view of Li-wei He (The Virtual Cinematographer: A Paradigm for Automatic Real-Time Camera Control and Directing).

Regarding claim 1, H. Bianchi teaches, an automated audio/visual presentation of a lecture (fig. 1), and a camera system that provides multiple camera views of the lecture, (fig. 1, page 2, lines 6 - 14), a virtual director that uses probabilistic rules to select a current camera view from the multiple camera views and is capable of changing the current camera view by switching between the multiple camera views in response to a triggering event (page 2, lines 10 – page 6, lines 9).

H. Bianchi is silent in regards to explicitly mention a set of expert video production rules that applied to select camera view.

Li-Wei in the same field teaches that filmmakers have developed a set of expert video production rules to control the camera orientation and to choose the instance in

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which the camera orientation with respect to the new line of interest is closest (page 1, right column, page 2, paragraphs below fig. 2 and page 4, paragraph 3.2.2).

In view of the above, it would have been obvious to one of having ordinary skill in the art at the time of the invention was made to modify fully automatic multi camera system of Bianchi in accordance with the teaching of Li-Wei to include rules to control the camera orientation and to choose the instance in which the camera orientation with respect to the new line of interest is closest, as suggested by Li-Wei (page 1, right column, page 2, paragraphs below fig. 2 and page 4, paragraph 3.2.2).

Regarding claim 2, combination of Bianchi and Li-Wei teaches, wherein, the set of expert video production rules is applied by the virtual director to determine to which of the multiple camera views to switch (Li-Wei; page 4, paragraph 3.2.2).

Regarding claim 3, the limitations, triggering event and determine when to switch the current camera view, have been discussed earlier with regards to claims 1 – 2 above.

Regarding claim 4, Bianchi teaches, wherein the camera system includes a single camera (i.e. Pages 2 – 3, tracking camera).

Regarding claim 5, Bianchi teaches, wherein the camera system includes a plurality of cameras (i.e. page 2, lines 12 – 13).

Regarding claim 6, Bianchi teaches controlling camera in tracking an object within the lecture (fig. 1, in page 3). But is silent in regards to virtual cinematographer.

Li-Wei in the same field teaches a real time camera controller for automatic cinematographer, called the virtual cinematographer (page 1, abstract, and right column, third paragraph).

In view of the above, it would have been obvious to one having ordinary skill in the art at the time of the invention was made to utilize fully automatic multi camera system of Bianchi in accordance with the teaching of Li-Wei to demonstrate its operation in the context of a virtual party/environments, as suggested by Li-Wei (page 1, abstract, and right column, third paragraph).

Regarding claim 7, Bianchi teaches, providing a camera view of an audience, (Bianchi, page 1, abstract).

Regarding claim 8, Bianchi teaches, a microphone-array audience tracker that controls the audience tracking camera in tracking a member of the audience (page 10, lines 15 – 19).

Regarding claims 9 - 10, Bianchi teaches, an audience-tracking status module that provides status information of the audience-tracking camera to the virtual director (page 10, lines 15 – 19).

Regarding claim 11, Bianchi teaches, wherein the camera system includes a lecturer-tracking camera that provides a camera view of a lecturer (i.e. figs. 1 and 2).

Regarding claim 12, Bianchi teaches, motion tracker controls tracking camera in tracking the lecturer based on movement (page 3, lines 1 – 8).

Regarding claim 13, Bianchi teaches a fully automatic, multi camera system for tracking and televising; therefore, the camera status information has to be known and provided to the system, in order to be able to track and televise in a proper manner.

Regarding claim 14, Bianchi teaches, wherein the virtual director includes an event generator that generates the triggering event, (page 2, Auto Auditorium tracking camera).

Regarding claims 15 – 16, combination of Bianchi and Li-Wei teaches the claimed, time transition, and location transition (Li-wei; abstract, lines 9 – 13).

Regarding claim 18, the limitations claimed have been analyzed and rejected with respect to claim 1 above. Furthermore; Bianchi teaches video mixing and selection among multiple camera view based using probabilistic transition to produce watchable programs (page 2, Auto Auditorium Director), which implies that the selection is a weighted random, since it is based on probabilistic transition.

Regarding claim 19, Bianchi teaches, computer-readable medium having computer-executable instructions (Bianchi, abstract, also page 2, 6 – 8) and computer executable instruction would have been necessitated by the system.

Regarding claims 20 - 21, the limitations, set of video production rules, have been analyzed and rejected with respect to claim 1 above.

Regarding claims 22 - 23, the limitations claimed have been analyzed and rejected with respect to claims 1 and 14.

Regarding claims 17 and 25, combination of Bianchi and Li-Wei teaches the claimed, finite state machine (Li-wei; abstract, lines 6 – 8).

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Regarding claims 26 - 27, the limitations claimed have been analyzed and rejected with respect to claims 7 – 8 above.

Regarding claim 28, the limitations claimed have been analyzed and rejected with respect to claim 11 above.

Regarding claims 29 - 30, the limitations claimed have been analyzed and rejected with respect to claims 1 and 12 above.

Regarding claims 31 - 34, the limitations claimed have been analyzed and rejected with respect to claims 1, 11 and 18.

Contact

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Behrooz Senfi** whose telephone number is **(571) 272-7339**.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, **Mehrdad Dastouri** can be reached on **(571) 272-7418**.

Hand-delivered responses should be brought to Randolph Building, 401 Dulany Street, Alexandria, Va. 22314.

Any inquiry of a general nature or relative to the status of the application or proceeding should be directed to the Technology Center 2600 Customer Service Office whose telephone number is **(571) 272-6000**,

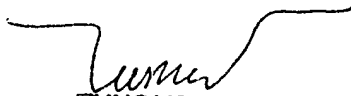
Or faxed to:

(571) 273-8300

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

B.M.S.


TUNG VO
PRIMARY EXAMINER